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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/798,270 | 03/12/2004 | Chang-yeob Choo | 1793.1168 | 5868 |
| 21171 7590 08/29/2008 STAAS & HALSEY LLP | | | EXAMINER | |
| SUITE 700 | | GIESY, ADAM | | |
| 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | ART UNIT | PAPER NUMBER |
| | | | 2627 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 08/29/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|--------------|--|--|--|--|
| | 10/798,270 | CHOO ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | ADAM R. GIESY | 2627 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 21 M | av 2008. | | | | | |
| | action is non-final. | | | | | |
| <i>;</i> — | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-4,7-12,15-19,21-27 and 29-40</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-4,7-12,15-19,21-27 and 29-40</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | • | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | r | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 12 March 2004 is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| ·— ·— | a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. | | | | | |
| | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4 Paper No(s)/Mail Date 5 Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | |
| | | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-4, 9-12, 17-19, 25-27, and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein (EP Pat. No. 1,160,787 A2) in view of Koudo et al. (hereinafter Koudo US Pat. No. 5,956,307).

Claims 1-4, 9-12, 17-19, 25-27, and 33-40 are rejected for the same reasons as discussed in the previous Office Action, mailed on 2/21/2008 (see Response to Arguments below).

3. Claims 7, 8, 15, 16, 21-24, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein (EP Pat. No. 1,160,787 A2) in view of Koudo et al. (hereinafter Koudo – US Pat. No. 5,956,307) and further in view of Choi et al. (hereinafter Choi – 7,092,334 B2).

Claims 7, 8, 15, 16, 21-24, and 29-32 are rejected for the same reasons as discussed in the previous Office Action, mailed on 2/21/2008 (see Response to Arguments below).

Response to Arguments

4. Applicant's arguments filed 5/21/2008 have been fully considered but they are not persuasive.

Applicants argue, on page 10 of the Response, that the Goldstein reference does not disclose changing the CAV "to prevent [the buffer] underrun from occurring." Examiner respectfully disagrees. A buffer underrun is caused by data, from the buffer, being used for recording faster than it can be supplied to the buffer. Thus, when there is no information in the buffer (read: buffer underrun) then a recording error occurs as there is no more information to record. Examiner asserts that, in fact, Goldstein lowers the recording speed of the medium when a buffer underrun occurs in order to allow the data to build up in the buffer so that it can be recorded, thus preventing the underrun (or recording error) from occurring again.

Applicant further argues, on page 10 of the Response, that Koudo does not disclose a buffer underrun error, thus the reference is not able to be combined with Goldstein to overcome the instant claims. Examiner respectfully disagrees. Examiner notes that Goldstein only mentions "write speed" and fails to specifically mention Constant Angular Velocity (CAV) recording (as was noted throughout the previous office action – for example see previous Office Action, Page 3, end of the first paragraph). Examiner asserts that Koudo was not cited in order to discuss buffer underruns, but merely to show that it is well known in the art of optical recording to record in a CAV mode.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The above arguments are repeated by Applicant on pages 10-12. Examiner asserts that the aforementioned arguments apply to all corresponding arguments in the Response.

Applicant further argues, on page 13 of the Response, that none of the references cited show all of the limitations of claim 8. Examiner respectfully disagrees. Examiner once again notes Figures 2 and 6 of the Choi reference and notes that both Figures clearly show the use of ATIP and TE/FE signals (respectively) in determining whether an error has occured.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The above arguments are repeated by Applicant on pages 13-14. Examiner asserts that the aforementioned arguments apply to all corresponding arguments in the Response.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to ADAM R. GIESY whose telephone number is (571)272-7555. The

examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TAN Xuan DINH/ Primary Examiner, Art Unit 2627 August 28, 2008

ARG 8/28/2008 /Adam R. Giesy/ Examiner, Art Unit 2627